COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF MARROWBONE WATER
DISTRICT, CUMBERLAND COUNTY, KENTUCKY)
FOR A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY AUTHORIZING SAID
DISTRICT TO CONSTRUCT ADDITIONS,
EXTENSIONS AND IMPROVEMENTS TO ITS
EXISTING MUNICIPAL WATER DISTRIBUTION
SYSTEM PURSUANT TO THE EXPRESS
PROVISIONS OF CHAPTERS 74 AND 106 OF
THE KENTUCKY REVISED STATUTES;
SEEKING APPROVAL OF A NEW SCHEDULE OF
WATER SERVICE RATES AND CHARGES; AND
SEEKING APPROVAL FOR THE ISSUANCE OF
CERTAIN SECURITIES

CASE NO. 9302

ORDER

The Marrowbone Water District ("Marrowbone") filed an application March 19, 1985, for approval of adjustments to its water service rates, authorization to construct a \$679,000 waterworks project, and approval of its financing for the proposed project.

The Commission entered an Interim Order August 29, 1985, which granted Marrowbone a Certificate of Convenience and Necessity to proceed with the waterworks construction project and approved its financing plan. Therefore, this Order will address only Marrowbone's rate adjustment proposals.

The rates proposed by Marrowbone would produce additional annual revenues of \$34,342, an increase of 42 percent over normalized test-period revenues. Based on the determination

herein, the revenues of Marrowbone will increase by \$12,213 annually, an increase of 15 percent over normalized test-period revenues.

A hearing was held in the offices of the Commission on July 30, 1985. There were no intervenors and no protests were entered. At the hearing, Marrowbone was requested to file a revised test-year operating statement, organized according to the Uniform System of Accounts for Water Utilities, reflecting pro forma adjustments that are known and measurable. The additional information requested at the hearing was supplied by Marrowbone on August 7, 1985.

COMMENTARY

Marrowbone is a non-profit water district organized and existing under the laws of the Commonwealth of Kentucky and serves approximately 442 residential customers in Cumberland County, Kentucky.

TEST PERIOD

The Commission has adopted the 12-month period ended December 31, 1984, as the test period for determining the reasonableness of the proposed rates. In utilizing the historical test period, the Commission has given full consideration to known and measurable changes found reasonable.

REVENUES AND EXPENSES

As part of its response to information requested at the hearing of July 30, 1985, Marrowbone proposed several adjustments to test-year revenues and expenses. Marrowbone's proposed adjustments include the effect that the new customers will have

upon the revenues and expenses of the district. Although the Commission recognizes that some increase in various expenses may occur due to extension of Marrowbone's water distribution system, the inadequacy of evidence supporting most of the proposed adjustments has resulted in disallowance of those adjustments. Therefore, the Commission urges Marrowbone, prior to filing future rate cases, to review the revenue requirements methodology used by the Commission and, if necessary, consult with Commission staff in order that it might understand what is required to justify a rate increase request. The Commission has made, for rate-making purposes, the following modifications to Marrowbone's proposals:

Salaries and Labor Expense

Marrowbone proposed adjustments to the following Salaries and Labor Expense accounts: Account Numbers 600, 620, 630, 640, Proposed adjustments were based on Marrowbone's intention to employ one additional laborer and a person to assist bookkeeping and general administration. Furthermore. in Marrowbone stated its intent to increase the salaries of two existing employees by 10 percent. Marrowbone provided no details in regard to these proposed adjustments and the Commission is of the opinion that it has not demonstrated the benefit to the Therefore, Commission allowed, the has for ratepayers. rate-making purposes, the test-year actual charges to these various Salaries and Labor Expense accounts.

Supplies and Other Expenses; Miscellaneous General Expenses; Electric Expense

Marrowbone proposed adjustments to Account Numbers 622, 632, 641, 903, 921 and 930, due to the proposed increase in customers. The adjustments were based on the actual per-customer cost incurred during the test year. Marrowbone did not provide any evidence showing the direct relationship of these expenses to the number of customers receiving service. With specific regard to electric expense, a preferable method of determining projected power for pumping expense based upon the additional KWH usage due to extension of the waterworks system would be considered by the Commission. However, Marrowbone has not provided sufficient information for such calculations to be made. Although some increase in these expenses may be reasonably expected, Commission is of the opinion that the adjustments proposed by Marrowbone are not sufficiently known and measurable and, therefore, have not been included for rate-making purposes herein. Furthermore, an examination of test-year charges to Account No. 641 revealed that, during the test year, Marrowbone purchased water meters from Water Works Supplies of Kentucky, Inc. The Commission is of the opinion that this expenditure was for capital items that should have been capitalized rather than expensed. Therefore, test-year charges to that account have been reduced by \$180 for rate-making purposes herein. The Commission has determined that the water meters should be depreciated over a period of 10 years.

Outside Services Employed; Property Insurance

Marrowbone proposed adjustments to these two accounts based entirely on estimates. In its explanation of pro forma adjustments filed August 7, 1985, Marrowbone stated that it had discussed the general increase in insurance costs with its insurer, but provided no quotes from an insurance agent. It is the Commission's opinion that proposed adjustments to these two accounts cannot be considered known and measurable and, therefore, only test-year actual charges have been included for rate-making purposes herein.

Purchased Water Expense; Chemicals Expense

Marrowbone proposed adjustments to Purchased Water and Chemicals Expense of \$244 and \$1,626 respectively due to the proposed increase in customers and based on the actual per-customer cost incurred during the test year.

For the test year, Marrowbone produced 98.3 percent of its water and purchased only 1.7 percent. An examination of Marrowbone's annual reports for each of the 5 years prior to the test year shows that Marrowbone produced 100 percent of its water for those years. Since Marrowbone produced more gallons in 4 of those 5 years than it did during the test year, it does not appear that water purchases are necessitated by the inability to produce sufficient supply. Marrowbone provided no evidence that shows that water purchases will increase due to the increase in customers.

According to its 1984 Annual Report, Marrowbone had test-year water loss of 29.8 percent. The Commission is of the

opinion that, for rate-making purposes, Marrowbone's water loss should be limited to 15 percent. Therefore, the Commission has allowed, for rate-making purposes, purchased water expense of \$389.

The Commission is of the opinion that chemicals expense will increase in proportion to the additional gallons that must be produced due to the increase in customers. However, both the test-year gallons produced and the additional gallons for the increase in customers have been limited to a 15 percent water loss. After that adjustment, the Commission has allowed, for rate-making purposes, chemicals expense of \$3,606.

Maintenance of Water Treatment Plant; Taxes Other than Income Taxes

Marrowbone proposed to increase charges to these two accounts by \$1,415, or 45 percent based on the increased size of the district. Marrowbone provided no explanation as to whether the 45 percent represents an increase in area served, number of customers, miles of water main, tax assessment rates, etc. Also, Marrowbone provided no evidence showing the direct relationship of these expenses to the size of the district. Marrowbone's 1984 Annual Report shows that 97 percent of the charges to Taxes Other than Income Taxes were for payroll taxes. Payroll taxes are directly related to salaries and labor expense, not the size of the district. As explained in a previous section, Marrowbone's adjustments to salaries and labor expense were not allowed. Commission is of the opinion that these adjustments cannot be considered known and measurable based on the evidence provided and has, therefore, included only test-year charges to these accounts for rate-making purposes herein.

Maintenance of Mains Expense

Marrowbone proposed an adjustment of \$3,366 to this expense based on the following: (1) averaging the expense for 1983 and 1984; the 2-year average comes to \$2,440 compared to the test-year amount of \$2,002; (2) an estimate that the amount of \$2,440 will double due to the increased size of the district; and (3) adding another 10 percent for labor and materials for line maintenance.

Although Marrowbone reported, in its Annual Report, \$2,878 in maintenance of mains expense for 1983, it charged only \$631 to that account in 1982, \$2,149 in 1981, and made no charges at all for either 1979 or 1980. Therefore, it does not seem reasonable to base, in part, an adjustment on the average expense for 1983 The latter two bases for Marrowbone's proposed and 1984. adjustment are merely speculative and the new lines should require only minimal maintenance in the first years of operation. Commission's is that Marrowbone's Therefore. the opinion adjustments are not known and measurable, and the test-year amount of maintenance of mains expense has been included for rate-making purposes herein.

Depreciation Expense

Marrowbone reported test-year depreciation expense of \$13,839. Marrowbone proposed to eliminate depreciation expense in order that it might be allowed a 1.5x debt service coverage. The Commission in some instances allows a debt service coverage of

1.5% above operating and maintenance expenses exclusive of depreciation. However, in arriving at adjusted operating and maintenance expenses, the annual depreciation allowed for rate-making purposes should be included.

The Commission has made an adjustment to test-year actual depreciation expense because it is of the opinion that allowable depreciation expense for rate-making purposes should be calculated only on plant funded with capital other than Contributions in Aid of Construction. Such a method insures that ratepayers pay only for the plant in which the utility has made an investment and not the plant which the utility has acquired at no cost.

According to Marrowbone's 1984 Annual Report, gross utility plant in service at the end of the test year amounted to \$504,472. Contributions in Aid of Construction totaled \$351,765 at the end of the test period. Thus, depreciation on contributed property comes to \$9,650, or 69.7 percent of total depreciation expense.

The Commission has determined that an additional adjustment should be made to test-year depreciation expense. As mentioned in a previous section, items totaling \$180 should have been capitalized rather than expensed. Test-year depreciation expense should be increased by \$18 to reflect depreciation on these items that should be added to plant Account No. 346--Meters.

In response to Item No. 19 of the Commission's Information Order of June 17, 1985, Marrowbone proposed to depreciate the estimated cost of the new construction at a rate of 2.5 percent. The total estimated cost of the new construction is \$679,900, but \$283,000 will come from a Farmers Home Administration grant and

\$24,900 has come from customer contributions. Therefore, the amount of non-contributed property comes to \$372,000 and allowable depreciation expense on new construction is \$9,300. The net result of the Commission's adjustments is allowable depreciation expense of $$13,507^2$ and that amount has been included for rate-making purposes herein.

After consideration of the aforementioned adjustments, the Commission finds Marrowbone's test-period operations to be as follows:

	Actual	Commission	Adjusted
	Test Period	Adjustments	Test Period
Operating Revenues Operating Expense	\$ 57,522	\$ 23,964	\$ 81,486
	56,112	2,239	58,351
Net Operating Income	\$ 1,410	\$ 21,725	\$ 23,135
Other Income	33	-0-	
Other Deductions	$\frac{6,194}{\$ (4,751)}$	17,854	24,048
Net Income		\$ 3,871	\$ <880>

REVENUE REQUIREMENTS

The Commission is of the opinion that the adjusted test-period operating loss is clearly unfair, unjust and unreasonable. The Commission finds the debt-service coverage method to be a fair, just and reasonable method of determining revenue requirements in this case and adequate to allow Marrowbone to pay its operating expenses, meet its debt-service requirements and maintain a reasonable surplus. For this case, calculations were made to determine Marrowbone's revenue requirement using a

 $^{372,000 \}times 2.58 = $9,300.$

² \$13,839 - 9,650 + 18 + 9,300 = \$13,507.

1.5x and then a 1.2x debt-service coverage. In using a 1.5x coverage, depreciation expense is excluded for purposes of the calculation of the revenue requirement. Since Marrowbone's revenue requirement is \$4,822 higher using the 1.2x coverage than with the 1.5x coverage, the Commission has chosen to allow the 1.2x coverage. The Commission finds Marrowbone's revenue requirement to be \$93,732 based upon a 1.2x debt-service coverage which would require an increase in annual revenue of \$12,213.

RATE DESIGN

Marrowbone bills all customers on a single, declining block rate schedule containing six rate steps ranging from a minimum usage of 2,000 gallons at \$6.00 to an over 20,000 gallon usage block at \$.60 per 1,000 gallons. Marrowbone did not propose any change in the usage levels; however, it did propose to change the rate design by applying a greater percentage of the requested increase to the larger usage levels.

Information filed by Marrowbone³ clearly shows that the current rates for the large usage levels are much lower than the cost of water production and transmission; thus, creating a situation whereby Marrowbone's small users provide a subsidy for large volume users.

The Commission is of the opinion that this is unfair, unjust and unreasonable and that Marrowbone's rate design should

Response filed August 7, 1985, Statement of Revenue and Expense Projections.

be changed so that all usage levels more accurately reflect the cost of water service.

Marrowbone also proposed to increase its tap fee for 5/8-inch x 3/4-inch meters to \$300 and provided cost justification therefor. The Commission is of the opinion that this is fair, just and reasonable and should be approved.

FINDINGS AND ORDERS

The Commission, after consideration of the application and evidence of record and being advised, is of the opinion and finds that:

- 1. Marrowbone's rate design should be changed to more accurately reflect the cost of water service at all usage levels.
- 2. The rates in Appendix A are the fair, just and reasonable rates for Marrowbone in that they will produce gross annual revenue from water sales of \$91,533. These revenues will be sufficient to meet Marrowbone's operating expenses found reasonable for rate-making purposes, service its debt and provide a reasonable surplus.
- 3. The rates proposed by Marrowbone would produce revenue in excess of that found reasonable herein and should be denied.
- 4. The tap fee proposed by Marrowbone is fair, just and reasonable and should be approved.
- 5. Marrowbone has incorrectly reported as expenses on its test-period income statement an amount that should be capitalized as utility plant in service.

IT IS THEREFORE ORDERED that the rates and charges in Appendix A be and they hereby are approved for service rendered by Marrowbone on and after the date of this Order.

IT IS FURTHER ORDERED that the rates proposed by Marrowbone be and they hereby are denied.

IT IS FURTHER ORDERED that Marrowbone shall capitalize all items of water utility plant in the appropriate plant in service accounts in accordance with the Uniform System of Accounts for Class C Water Utilities.

IT IS FURTHER ORDERED that within 30 days from the date of this Order Marrowbone shall file with this Commission its revised tariff sheets setting out the rates approved herein.

Done at Frankfort, Kentucky, this 15th day of October, 1985.

PUBLIC SERVICE COMMISSION

Chairman

Vice Chairman

Vice Chairman

Complissioner

ATTEST:

Secretary

APPENDIX A

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 9302 DATED OCTOBER 15, 1985

The following rates and charges are prescribed for customers of Marrowbone Water District. All other rates and charges not specifically mentioned herein shall remain the same as those in effect under authority of this Commission prior to the effective date of this Order.

USAGE BLOCKS		LOCKS	RATES				
	First 2,000	gallons	\$	6.85	.85 Minimum		
	Next 2,000	gallons		2.25	per	1,000	gallons
	Next 2,000	gallons		1.95	per	1,000	gallons
	Next 4,000	gallons		1.60	per	1,000	gallons
	Next 10,000	gallons		1.40	per	1,000	gallons
	Over 20,000	gallons		1.20	per	1,000	gallons
	Tap Fee - 5	/8" x 3/4" Meter	\$	300.	00		